



ENVIRONMENTAL PROTECTION AGENCY

On-the-Ground Projects that Accelerate the Pace of Environmental Protection

Good Samaritan Clean-up of the American Fork Canyon

In an innovative project discussed at the August 2005 White House Conference on Cooperative Conservation, EPA worked with Trout Unlimited (TU), Snowbird Corporation, the U.S. Department of Agriculture's (USDA) Natural Resource Conservation Service, Utah Senator Bob Bennett, and the Tiffany & Company Foundation to clean up waste from old mines in the American Fork Canyon watershed in Utah. Although active mining operations ceased in the 1860s, runoff from the abandoned mine still threatens fish, wildlife and human health. After running over debris, water entered the creek carrying a load of lead 1,000 times greater than federal limits. From October 2004 to October 2005, EPA, the U.S. Forest Service (USFS), and TU negotiated the terms of an administrative order of consent that included a work plan and provided flexibility for TU on liability related to cleanup work in the canyon; the work itself took only seven weeks. TU's final report on the cleanup identified the following accomplishments:

- Reduction of lead levels in waste rock and soils from between 3,000 and 9,600 parts per million (ppm), to between 144 to 580 ppm, well below the preliminary remediation goal of 1,900 ppm.
- Construction, removal, and consolidation of more than 36,500 cubic yards of mine waste rock and waste rock piles into a lined, engineered repository seeded with native plants and fitted with ground water monitoring.
- Removal of waste rock material that will eliminate 90 percent of the toxic materials in the mine sites.
- Reconstruction and natural contouring of access roads and old mine/mill sites.
- Preservation of structures for historical preservation
- Construction of a kiosk that informs the community about the benefits of the clean up.

To accelerate the pace of critical environmental cleanups such as these, the Administration proposed legislation that would eliminate lengthy site-by-site negotiations over potential liability related to such projects. This effort is described earlier in this report. See [GOOD SAMARITAN CLEAN WATERSHED ACT](#), page 6 of this report. Website: <http://www.tu.org/site/pp.asp?c=7dJEKTNuFmG&b=277896>

Great Lakes Regional Collaboration, Wetlands Program

The Great Lakes Regional Collaboration (GLRC) was conducted through coordinated efforts with the Department of Interior. See [Great Lakes Regional Collaboration](#) on page 25 of this report.

Cooperative Efforts to Protect and Restore the Chesapeake Bay

In responding to the challenges of protecting and restoring the Chesapeake Bay, high-level federal officials meet on an annual basis to learn about the status of program commitments and high-priority interagency initiatives. In October 2005, EPA brought together 17 federal agency partners to sign the “Resolution to Enhance Federal Cooperative Conservation in the Chesapeake Bay Program,” which renewed the agencies’ commitment to support the Chesapeake Bay Program (CBP) partnership. On November 29, 2006, the partners agreed that the priority for 2007 would be to develop goals and a framework to substantiate federal involvement with Chesapeake Executive Council Directive 06-1, “Protecting the Forests of the Chesapeake Watershed.” In addition, federal agencies will play a key role in the CBP’s strategic implementation planning.

Examples of fiscal 2006 cooperative conservation activities in the Chesapeake Bay watershed include:

- To accelerate the pace of water quality and aquatic habitat restoration, EPA and states are taking a number of steps to make the most cost-effective use of available regulatory, incentive and voluntary tools.
- In partnership with eight federal, state, local, and non-governmental partners, FWS helped to create a living shoreline along 300 feet of shoreline in Annapolis, Maryland, as an alternative to armoring this shoreline.
- EPA, FWS, and NOAA are working together to ensure that a scientifically defensible environmental impact statement for non-native oysters in the bay is produced, through development of a research framework, peer review guidelines, and decision criteria.
- The Baltimore/Washington Partners for Forest Stewardship, which includes four federal agencies, one state agency, and a non-governmental organization. USDA coordinates management and restoration activities on 26,000 contiguous federally owned acres in the highly urbanized Baltimore-Washington corridor. The goal is for federal landholding agencies to use sustainable forestry for water quality to jointly manage their land.

Restoring the Anacostia River

On November 28, 2006, EPA Region 3 held a one-day dialogue on restoration and protection of the Mid-Atlantic region’s Anacostia River Watershed. CEQ Chairman James Connaughton and EPA Assistant Administrator for Water Ben Grumbles attended the event, which was intended to engage and broaden the constituency involved in restoring the Anacostia. About 80 individuals representing a range of interests, including economic institutions, developers, federal, state, and local government agencies, environmental groups, the transportation sector, and others, participated in the meeting. The Anacostia River has been identified as a priority area by the Chesapeake Bay Program. In March 2005, the Anacostia Watershed Restoration Committee (AWRC) and other stakeholders agreed to reconstitute AWRC’s organizational structure and to develop a comprehensive watershed management plan. In June 2006, a new entity, the Anacostia Watershed Restoration Partnership (AWRP) was inaugurated, bringing together governmental agencies and nongovernmental organizations to develop and implement a

comprehensive watershed restoration plan. A critical aspect of the AWRP is recognition that a broad, supportive restoration constituency is essential for ultimate success. EPA is committed to expanding and broadening the Anacostia restoration constituency by engaging committed stakeholders. The November 2006 meeting was an important step toward a more collaborative approach to restoring the Anacostia watershed.

National Clean Diesel Campaign

Particulate matter and nitrogen oxides in air emissions from diesel engines threaten human health and the environment. Using cleaner fuel alternatives and decreasing diesel fuel use through idle-reduction technologies support energy independence and greenhouse gas emission reductions. EPA's National Clean Diesel Campaign (NCDC) is using regulation, voluntary programs, and partnerships to address these issues. Among the voluntary partnerships NCDC conducts with businesses, government, community organizations, industry, and others to reduce emissions from the 11 million diesel engines in use in the United States is the SmartWay Transport program. This effort is designed to improve the environmental performance of the freight-delivery system in the United States through market-based approaches to reduce fuel consumption and air pollution, eliminate unnecessary idling of engines, install emission control devices, and improve freight logistics. Since its inception in 2004, more than 260 shipping and trucking companies, representing more than 300,000 diesel trucks, have joined SmartWay Transport. NCDC is funded through State and Tribal Grant funds for diesel grants. The program received \$7.4 million in fiscal 2005 and \$6.9 million in fiscal 2006.

Another effort under NCDC, the West Coast Collaborative, is among the first of seven regional diesel partnerships in the United States and includes EPA, USDA, the U.S. Department of Energy, the U.S. Department of Transportation (DOT), the governments of Canada and Mexico, and state, local, tribal, non-profit, and private sector partners. Since its inception in September 2004, the collaborative has brought together over 800 partners and has funded 38 projects to reduce diesel emissions in Alaska, Arizona, California, Hawaii, Idaho, Nevada, Oregon, and Washington. The projects focus on the rail sector, trucking, construction and distributed generation, agriculture, biofuels, marine vessels and ports. More than \$5.2 million in EPA grants have been matched by nearly \$23 million in funds and in-kind contributions from collaborative partners.

Website: <http://www.epa.gov/cleandiesel/>, <http://www.westcoastdiesel.org/>

Green Highways Partnership

The Mid-Atlantic Green Highways Partnership (GHP) is a voluntary, public/private initiative that is revolutionizing our nation's transportation infrastructure. Through concepts such as integrated planning, regulatory flexibility, and market-based rewards, GHP seeks to incorporate environmental streamlining and stewardship into all aspects of the highway lifecycle. With an extensive network of environmental, industrial and governmental partners, GHP is focused on partnership development, including partnerships on watershed-based stormwater management, recycling and reuse, and conservation and ecosystem management; a recognition program for programs, projects, and activities that demonstrate excellence in pursuing GHP's goals; and opportunities through pilot projects. Examples of pilot projects under GHP include protection of the

Anacostia River Watershed, demonstration of innovative stormwater management tools, and optimization of the beneficial use of industrial projects. Website: <http://www.greenhighways.org>

EPA Region 4 Countywide EMS Initiative

In August 2003, Bartow County, Georgia, the Cartersville Bartow County Chamber of Commerce, business and industry representatives, agriculture leaders, the State of Georgia, the Georgia Institute of Technology Peer Center, and EPA joined together on a collaborative pilot demonstration project to implement the nation's first countywide environmental management system (EMS). The EMS has resulted in improved air quality and reductions in solid waste production, energy consumption, and water use. Major industries reporting improvements as a result of the EMS include the Georgia Power Company, Shaw Industries, and Anheuser-Busch. Accomplishments of the EMS include: more EMSs in Bartow County per capita than any county in the nation; a 30 percent reduction in water usage; an 11 to 20 percent reduction in nonrenewable energy per unit of production; a 26 percent reduction in air emissions; recycling of 3 million pounds of cardboard, 8 million pounds of scrap metal, 700,000 tons of fly and bottom ash, 7,000 fluorescent light bulbs, 43,000 gallons of used motor oil, 67 tons of batteries, and 75 tons of glass. Most recently, Bartow County joined Region 4's Southeast Diesel Collaborative as a partner to increase diesel retrofits in schools and vehicle fleets, advancing anti-idling campaigns, and increasing renewable fuels as a component of the EMS.

To meet increased interest in countywide EMSs in Georgia and other Region 4 states, largely due to Bartow County's success, EPA Region 4 provided a grant to the Georgia Tech Peer Center to develop an EMS start-up kit for local officials. The kit will provide the framework for a comprehensive set of tools for implementing a countywide EMS. The final product will be based on the principles in the ISO 14001: 2004 EMS standard and EPA's compliance-focused EMS documents. The toolkit should be available in early 2007.

Websites: <http://www.peercenter.net/>, <http://www.bartowga.org/Envms/index.html>

WaterFirst Community Program

EPA conceptually developed the WaterFirst Community Program to recognize and reward local governments across Georgia for beyond compliance with state and federal requirements related to the management and stewardship of shared water resources. EPA then worked with the Georgia Department of Community Affairs (DCA) to implement the program, which began in 2002. The program provides communities with technical assistance each year to improve their water stewardship and management programs and to gain the WaterFirst designation. To date, eight communities have received the WaterFirst designation and 10 more are working toward the designation. Each year, DCA requests WaterFirst applications from cities and counties. Leaders on water issues from government, municipal, professional, and environmental organizations throughout the state review the applications. DCA partnered with the Georgia Environmental Facilities Authority to offer a one percent discount off the borrowing rate for state funded water related project loans to WaterFirst communities. In addition, DCA provides the

designated communities with administrative relief, bonus points on grants, and eligibility to receive Community Development Block Grants for water-related improvements. EPA supports WaterFirst by providing assistance with designation reviews.

WaterFirst requires communities to take a holistic approach to managing water resources. Clayton County, for example, has facilitated efforts to promote stormwater runoff control and linkages between water quality and land use and development. Gwinnett County has become a leader in the state on advanced wastewater treatment and watershed assessments. The next phase for WaterFirst will be to sponsor special issue retreats for designated communities, encouraging them to share their innovations with each other and support them as they achieve new levels of water resource management.

Southeast Regional Partnership for Planning and Sustainability

The Southeast Regional Partnership for Planning and Sustainability (SERPPAS) seeks to build partnerships among states, the military, and communities surrounding military installations in the southeastern United States. The initiative brings together the states of Alabama, Florida, Georgia, North Carolina, and South Carolina, the Office of the Secretary of Defense, the U.S. Army, the U.S. Navy, the U.S. Air Force, the U.S. Marines, EPA, USACE, and FWS. The effort is intended to develop regional projects that will conserve and protect biological resources, including endangered species, while accommodating the land needs of the military and economic development goals of the states. A steering committee has been formed to implement the SERPPAS work plan and a series of comprehensive GIS maps have been developed to support the partners' decision making. The work plan includes process components such as increasing communication and collaboration between military installations and neighboring communities, and projects such as sustaining the longleaf pine habitat, which incorporates specific efforts to protect the red cockaded woodpecker and the gopher tortoise. A marine/coastal component is currently under development. Website: <http://wrrc.p2pays.org/dodpartnership/defaultserppas.htm>

Initiative for Watershed Excellence: Upper Altamaha Pilot Project

The Initiative for Watershed Excellence: Upper Altamaha Pilot Project, funded by EPA and the Georgia Environmental Protection Department through Clean Water Act Section 319 funding, is a model for developing watershed support centers across the country. Through this program, the University of Georgia River Basin Center works with faculty and students from other colleges and universities in the Upper Altamaha basin to provide technical, organizational, and legal assistance to stakeholder groups to increase their capacity to enhance and protect water quality. The project is organized as a consortium of multidisciplinary faculty, staff, and students from the University of Georgia, Georgia College and State University, Gainesville College, and Mercer University. Outputs of the project include:

- Students partnered with a local government to address nutrient loading in an impaired stream. This analysis is being used to support a quality assurance plan for the stream.
- River Basin Center staff and students drafted a model septic management ordinance for local governments that will be completed in spring 2007.

- An Upper Altamaha stakeholder gathering attended by more than 75 participants representing local governments, state agencies, private businesses, non-governmental organizations, and academia was held at the River Basin Center in October 2006.
- The River Basin Center and the University of Georgia Cooperative Extension Service have partnered to create a position for Georgia's first watershed extension agent. This position provides local governments with cost-effective watershed management solutions.

Additional projects underway include development of a state-specific funding tools matrix, an economic valuation of Georgia's water resources, and a rural stormwater ordinance for communities in the Upper Altamaha watershed.

Websites: <http://www.rivercenter.uga.edu/service/iwe/iwe.htm>

Southeast Florida Coral Reef Initiative

In October 2002, the U.S. Coral Reef Task Force, established in 1998 by Executive Order 13089 and including 12 federal agencies (including EPA), seven U.S. states and territories, and three freely associated states, passed a resolution to improve implementation of the National Action Plan to Conserve Reefs. The resolution identified six focus areas for priority action and recommended development of local action strategies, which are three-year road maps for collaborative action to address specific threats to coral reefs in well-defined geographic areas. EPA worked with over 50 organizations, including the Florida Department of Environmental Education, NOAA, local county governments, University of Miami, Florida Sea Grant/Broward County Extension Education, the University of Florida, REEF, Cry of the Water, and Florida Sea Grant/Dade County Extension to develop detailed action strategies or projects to:

- Characterize the existing condition of the coral reef ecosystem
- Quantify, characterize, and prioritize land-based sources of pollution requiring action
- Identify how pollution affects the southeast Florida ecosystem
- Reduce impacts of land-based sources of pollution to the coral reef ecosystem

The final report for this project, *Southeast Florida Coral Reef Initiative: A Local Action Strategy*, was released to the public in December 2004. Many projects outlined in the action plan are underway, including assessing the current coral reef habitat and water quality, evaluating protective measures, and developing educational materials.

Efforts that Improve and Expand EPA's Cooperative Conservation Toolkit

Navigating Regulatory Barriers: Minimizing Litigation, Legislative Actions

Good Samaritan Clean Watershed Act

The Good Samaritan Clean Watershed Act would accelerate projects such as the American Fork Mine Cleanup and other critical cleanups. The Administration proposed legislation that would eliminate the need for lengthy site-by-site negotiations over potential liability related to such projects. For more details on the proposed act see [GOOD SAMARITAN CLEAN WATERSHED ACT](#) on page 6 of this report. Website:

<http://www.epa.gov/water/goodsamaritan/>

Environmental Conflict Resolution

EPA is actively implementing the November 28, 2005, OMB/CEQ “Memorandum on Environmental Conflict Resolution.” This effort builds on the Agency’s 30-year history of using environmental conflict resolution (ECR) to prevent or reduce environmental conflicts and promote constructive collaborative problem solving. In fiscal 2006, EPA sponsored and/or participated in more than 120 ECR cases, including environmental negotiations and public involvement activities in which a neutral third party such as a mediator or facilitator assists participants in having an effective dialogue. Most EPA headquarters and regional offices were involved in one or more of the cases, which addressed a broad spectrum of environmental decisions. EPA also continued its dedicated ECR programs in the Agency’s Conflict Prevention and Resolution Center and the Office of Administrative Law Judges, and enhanced its partnerships with other federal agencies; EPA participates actively in the interagency steering committee charged with implementing the ECR policy memorandum; and we jointly sponsored with the Department of the Interior an interagency workshop on evaluating the environmental and economic benefits of ECR in July 2006. Website: <http://www.epa.gov/adr>

Mercury Switches Negotiation

In August 2006, EPA’s Sector Strategies Program and Conflict Prevention and Resolution Center successfully concluded a two-year negotiation with the End of Life Vehicle Solutions Corporation, the American Iron and Steel Institute, the Steel Manufacturers Association, the Institute of Scrap Recycling Industries, the Automotive Recyclers Association, Environmental Defense, the Ecology Center (Ann Arbor), and representatives of the Environmental Council of the States with the goal of removing mercury-containing switches from scrap or retired vehicles. These switches were installed for convenience lighting in many vehicles manufactured prior to 2003. The negotiation resulted in the development and implementation of the National Vehicle Mercury Switch Recovery Program, which complements existing state mercury switch reduction efforts and will reduce mercury emissions by up to 75 tons over the next 15 years. Overall, an estimated 67 million switches are available for recovery. In 2006, more than 220,000 switches were collected and nearly 500 pounds of mercury were recovered from the switches.

Websites: <http://www.epa.gov/mercury/switch.htm>, www.elvsolutions.org

Environmental Initiative at U.S. Ports

In 2003, EPA’s Sector Strategies Program started the Ports Environmental Management Systems Assistance Project in partnership with the American Association of Port Authorities (AAPA) and the Global Environment and Technology Foundation (GETF). Of about 360 commercial ports in the United States, EPA’s efforts focus on the top 85 deep-draft public ports that AAPA represents. The greatest environmental opportunities for ports are in reducing air emissions, improving water quality, managing dredge material, and minimizing the impacts of growth. Since September 2004, the Ports EMS Assistance Project has worked with nine ports to develop EMSs. A final report on these efforts is titled *Promoting World Class Ports Through Environmental/Security Management Systems*. A second group of nine ports started development of their environmental and security management systems in February 2006. In September 2006,

EPA, as a member of the federal interagency National Dredging Team (which also includes USACE, the U.S. Maritime Administration, the National Marine Fisheries Service, the National Ocean Service, FWS, the U.S. Coast Guard, USDA, USGS, and the U.S. Navy), held a Regional Leadership Forum on the Environmental Implications of Port Operations and Growth. Participants included DOT, representatives from major U.S. ports such as Los Angeles, Houston, and New York, industry organizations, and environmental groups. At the conference, participants identified steps needed to include dredged material management in watershed plans and to include a watershed perspective in dredged material management activities.

EPA and AAPA have worked together to assist ports in developing emission inventories. An EPA document published in January 2006, *Current Methodologies and Best Practices in Preparing Port Emission Inventories*, describes what has been learned about development of port-related emission inventories to date and is a tool that can be used to inform the development of such inventories. Another publication, *Emission Reduction Incentives for Off-Road Diesel Equipment Used in the Port and Construction Sectors*, informs the development of incentives to reduce diesel emissions from off-road equipment used in the port and construction sectors.

Finally, three ports (Bellingham, Washington; New Bedford, Massachusetts; and Tampa, Florida) participated in pilot projects for two years as part of the Portfields Initiative, a federal interagency effort to help revitalize ports and improve the nation's marine transportation system while restoring and protecting coastal resources. Lessons learned from these pilot projects are documented in *Portfields: Charting a Course for Port Revitalization*, published in 2005, and the lessons are being shared with port communities Hurricane Katrina damaged.

Website: <http://www.epa.gov/sectors/ports/index.html>

Building Capacity

Collaboration and Partnering Competencies for Hiring, Training, and Rewarding EPA Employees

Incorporating the collaborative approaches of cooperative conservation into EPA's work depends on a high capacity for collaboration among the agency's employees. EPA is building collaboration and partnering competencies into the hiring, training, and rewarding of its employees. EPA's efforts have already achieved a number of results:

- Senior Executive Service Performance Standards for 2007—Performance plans for the highest levels of agency management now contain more explicit and enhanced language for collaboration and partnering.
- Orientation of New Headquarters Employees—This first-day orientation now includes a segment on the importance of collaboration and cooperative conservation.
- Competency-based Approach—Consistent with the President's Management Agenda, EPA is moving to a competency approach that is expected to allow us to better:
 - Direct human resources to properly align with agency goals;
 - Conduct analyses to ensure the organization is appropriately structured;

- Use recruitment, development, and other workforce strategies to address needs; and,
 - Ensure that workforce activities successfully accomplish the agency's mission.
- Leadership Development Program—EPA has revised its leadership development courses to ensure that collaboration competencies are adequately addressed in the training of agency employees in administrative, mid-level, professional, supervisory, and management positions.
- Agency-wide Award on Collaboration—In June 2006, EPA's Honor Awards Board established a new award for collaborative problem-solving. This award is designed to recognize the achievements of an employee who demonstrates exceptional leadership, skill and commitment in collaborating with other EPA employees and/or with states, tribes, other federal agencies, non-governmental organization, communities and external stakeholders to effectively solve a significant problem. This award will be presented for the first time in November 2007.
- Tracking Collaboration in Regulatory Development—EPA program offices currently conduct a wide range of public engagement and collaboration processes beyond the required notice and comment in development of regulations. EPA is considering requiring semi-annual reporting of stakeholder participation efforts in our internal regulation development management system to assess levels of collaboration associated with EPA rulemaking.

Targeted Watershed Grants

EPA's Targeted Watersheds Grant (TWG) program is a competitive grant program that provides funding to community-driven watershed projects. Since the TWG program began in 2003, EPA has provided over \$37 million to a total of 46 watersheds across the United States. For 2006, EPA will award up to \$16 million to as many as 20 of the nation's outstanding watershed practitioners. The TWG program provides watershed organizations and practitioners with resources to examine water-related problems in the context of the watershed in which they exist; to develop creative solutions to those problems; and to restore and preserve water resources through strategic planning and coordinated project management that include public and private sector partners. Applications for targeted watershed grants are generally due in the fourth quarter of the calendar year. Details on individual projects funded by TWGs are available from the program's website. Website: <http://www.epa.gov/twg>

Watershed Capacity Building Grants

EPA's capacity-building grants help grantees develop and disseminate tools, training, and technical assistance; enhance and integrate public and private land stewardship; promote on-the-ground conservation results and progress; and facilitate the exchange of information and advice to address watershed-based problems and help develop sustainable solutions. In 2003, the first year of this program, EPA awarded \$2.1 million over three years to five leading organizations: The Center for Watershed Protection (CWP), The International City/County Management Association, The River Network, The Southeast Watershed Forum, and The University of Alaska at Anchorage (UA). CWP conducted seven Watershed Institute courses for more than 800 water quality practitioners from across the country. UA held a workshop on building sustainable

partnerships that led to local officials of a remote village developing better sanitation practices and creation of a regional watershed steering committee to guide community-based restoration efforts. Recognizing the high return on these investments, in 2006 EPA will award \$3.2 million in capacity building grants to as many as seven organizations. Applications for watershed capacity building grants are generally due in the fourth quarter of the calendar year.

Website: <http://www.epa.gov/twg/capacity.html>

Community Action for a Renewed Environment Grant Program

The Community Action for a Renewed Environment (CARE) program is a competitive grant program that offers an innovative way for communities to address the risks from multiple sources of toxics in their environment. In November 2006, EPA Administrator Stephen Johnson announced the awarding of \$2.7 million in CARE grants to 16 communities across the country. Through CARE, local organizations, including non-profits, citizens, businesses, schools and federal, state, and tribal or local government agencies, create collaborative partnerships that implement local solutions to reduce releases of toxic pollutants and minimize exposure to toxic pollutants. CARE supports communities by helping them assess pollution risks while providing funding and access to EPA's other voluntary programs to address local environmental priorities. Application information about for the third round of CARE cooperative agreements will be distributed in early 2007. Previous CARE recipients include the International District Housing Alliance in Seattle, Washington, which used its grant to coordinate indoor air workshops and in-home air quality assessments for 95 residents. In May 2006, a CARE grant supported the first air quality stakeholders' meeting of the Clean Air Partnership in St. Louis, Missouri, which also recently began to provide information to several local facilities on potential voluntary pollution prevention actions. Website:

<http://www.epa.gov/care>

Collaborative Efforts on Improved Indoor Air Quality

Most Americans spend about 90 percent of their time indoors. Indoor levels of air pollution often may be 2 to 5 times higher, and sometimes 100 times higher, than outdoor levels. To help reduce the environmental health risks from contaminants in indoor environments, EPA provides cooperative agreements for demonstrations, training, education, and outreach projects. Cooperative agreement recipients must measure the results of their activities related to indoor air quality issues including pollutants and building types. In 2006, EPA awarded more than 30 cooperative agreements totaling approximately \$4 million to address indoor air quality issues such as asthma triggers, secondhand smoke, radon and other indoor air pollutants.

EPA is also working on indoor air issues abroad. The Partnership for Clean Indoor Air (PCIA), of which EPA is a member, was launched at the World Summit on Sustainable Development in Johannesburg to address the increased environmental health risk more than 2 billion people face in the developing world who burn traditional biomass fuels indoors for cooking and heating. In support of PCIA, EPA has awarded grants to 11 non-

profit organizations to implement innovative, community-based pilot projects to reduce indoor air pollution from household energy use. The \$1.3 million in funding for these grants was provided by the U.S. Agency for International Development and EPA.

Website: http://www.epa.gov/iaq/iaq_partners.html, <http://www.pciaonline@epa.gov>

Collaborative Science and Technology Network for Sustainability

Launched in 2004, the Collaborative Science and Technology Network for Sustainability (CNS) is a grants program that supports the Office of Research and Development's transition to sustainability. While the concept of sustainability is fairly intuitive, translating the concept into science that informs practical action is challenging. CNS aims to assist various stakeholders and the public in learning about and refining integrated and proactive approaches to environmental protection at a regional scale that form the basis for sustainability. The program currently focuses on two areas: Communities and the Built Environment; and Industrial Ecology and Organizational Behavior. CNS researchers are developing new approaches and applications in areas such as decision-making with uncertain and incomplete information; identification of appropriate problem boundaries; collaborative problem solving; foresight and futures; data management and synthesis; geographic information and modeling at multiple scales; system resilience; incremental and transformational systems change; community involvement and diverse perspectives; and environmental justice.

CNS projects connect diverse sets of partners including universities, federal agencies, cities, states, regional planning organizations, nonprofit organizations, and industry. Where appropriate, researchers are encouraged to work informally with EPA scientists and policy experts. For example, researchers in the City of Portland are determining the feasibility of using a credit trading system to create incentives for property owners to install small-scale, performance-based, storm water systems. Researchers from the New York Academy of Science are identifying and working with industry and local government to implement environmentally sound and economically feasible, system-wide pollution-prevention strategies for the New York/New Jersey Harbor watershed. Illinois Institute of Technology researchers are developing a model for water use that can lay the foundation for a water reuse ordinance in the Chicago Metropolitan area. A total of 12 projects were selected for CNS funding in 2005. A second CNS solicitation was offered in 2006. Funding decisions are currently being made on 10-12 projects. More information on projects currently funded under CNS can be found at the CNS website.

Website: <http://www.epa.gov/ncer/cns>

Water and Waste Program Integration

In 2004, a meeting of EPA Office of Water and Office of Solid Waste and Emergency Response (OSWER) division directors yielded the conclusions that although geographic opportunities exist for water and waste program coordination, a framework was needed to improve collaboration between such programs and make it more routine. EPA Region 8 was asked to develop a manual for watershed cleanup that would help regional water and waste program managers collaborate in implementing watershed cleanup projects. In 2005, Region 8 completed *Integrating Water and Waste Programs to Restore Watersheds*. The manual describes the interrelationships between programs and agencies

involved in watershed assessment and cleanup. It suggests potential opportunities for program integration. The manual also lists the primary programs and stakeholders likely to have lead roles in watershed cleanup and identified the resources available for watershed assessment and cleanup.

Website: <http://intranet.epa.gov/osrti/ard/sbp/wwintegration/index.htm>

Collaborative Cleanups

OSWER and EPA's Office of Water (OW) are promoting activities that better coordinate land cleanup and water protection, promote sustainable management approaches, and bring the strengths of stakeholders to the effort. The Urban Rivers Restoration Initiative is a partnership between EPA and the USACE (commemorated in July 2002 and September 2006 Memoranda of Understanding) for assessing the risk of and cleaning up contaminated urban rivers, with a focus on overcoming the challenges posed by the existence of multiple cleanup authorities and completing requirements. The One Cleanup Program is EPA's vision for how different cleanup programs at all levels of government can work together to ensure that resources, activities, and results are effectively coordinated, implemented, and communicated to the public. Both collaborative cleanup initiatives include a series of pilot projects emphasizing cross-program and cross-agency cooperation. OSWER and OW held annual meetings on collaborative cleanups in 2005 and 2006, and a third meeting is scheduled for fall 2007. The discussions at those meetings will inform a lessons-learned report that will share the experiences, strengths, and challenges faced by the collaborative cleanups pilots. The report will be released in early 2007.

Website: <http://www.epa.gov/landrevitalization>

Asset Management Video for Local Elected Officials

The Administrator's Local Government Advisory Committee (LGAC) is working with the EPA Office of Water to develop a short video for newly elected local government officials outlining the importance of maintaining and strengthening water infrastructure assets. Five members of the LGAC with extensive experience in water infrastructure at the local level provided their perspective and experience in managing water assets. This 20-minute training module should be available in spring 2007.

Regional Vulnerability Assessments

EPA's Regional Vulnerability Assessment (ReVA) program is an approach to regional scale, priority-setting assessment being developed by EPA's Office of Research and Development (ORD). This program is part of the Integrated Science for Ecosystem Challenges Initiative for fiscal 2000 sponsored by the White House Committee on the Environment and Natural Resources. ReVA will expand cooperation among other EPA program offices and ORD's laboratories and centers by integrating research on human and environmental health, ecorestoration, landscape analysis, regional exposure and process modeling, problem formulation, and ecological risk guidelines. ReVA is being developed to identify those ecosystems most vulnerable to being lost or permanently harmed in the next 5 to 25 years and to determine which stressors are likely to cause the greatest risk. The goal of ReVA is not exact predictions, but identification of undesirable environmental changes expected over the coming years. The ReVA program will extend

environmental assessments for the region by using integrative technologies to predict future environmental risk and support informed, proactive decision-making and prioritization of issues for risk management. One of the most important components of ReVA is the incorporation of the integrated information into web-based tools that can be used to support informed, proactive decision-making and prioritization. Accomplishing this evaluation will require integrating many different types of information from many different sources. Partnerships with other federal and state agencies as well as non-government organizations and academia will be required. Website: <http://www.epa.gov/reva>

Environmental Monitoring and Assessment Program

ORD's Environmental Monitoring and Assessment Program (EMAP), combined with EPA program offices, and regional offices, and other federal and state partners, are engaged in research programs to develop the tools necessary to monitor and assess the ecological status and trends of national aquatic resources. EMAP advances the science of ecological monitoring and ecological risk assessment, guides national monitoring with improved scientific understanding of ecosystem integrity and dynamics, and demonstrates multi-agency monitoring through large regional and national projects. In partnership with the Office of Water, EMAP research has helped produce the first defensible national assessment of streams which provides a baseline for future trends. EMAP produced the first defensible national estimate of estuarine conditions. ORD is currently developing with the Office of Water a flexible design and necessary indicators for conducting the first national lake condition survey. This research is also developing cost-effective and feasible methods for biological assessment for the Missouri, Ohio, and Mississippi Rivers, as well as other large and great rivers of the United States. Using an EMAP approach also allowed EPA to measurably demonstrate the effectiveness of EPA's air programs by showing significant improvement in the condition of acid sensitive lakes and streams. This work has been accomplished in partnership with national, regional, and state decision-makers. These efforts have underscored both the need for continuing partnerships between ORD and its clients to ensure applicability of ORD products and the client's interest in bringing existing knowledge together with the newest technologies to demonstrate the effectiveness of the environmental programs and policies. Website: <http://www.epa.gov/emap/>

Interstate Technology and Regulatory Council

The Interstate Technology and Regulatory Council (ITRC), co-sponsored by EPA, DOE, and DOD, is a state-led coalition of federal partners, industry participants, and other stakeholders that cooperative ventures to accelerate the adoption of new approaches and technologies for cleaning up contaminated sites and managing waste materials. ITRC, which originated in 1995, consists of 46 states, the District of Columbia, multiple federal partners, industry participants, and other stakeholder. ITRC accomplishes its mission by developing guidance documents and training courses to meet the needs of both regulators and environmental consultants, and working with state representatives to ensure that ITRC products and services have maximum impact among state environmental agencies and technology users. OSWER and ORD participate with other government agencies on ITRC. The council's teams, including researchers from EPA's Office of Research and

Development, prepare guidance documents and present classroom and internet-based training for state regulators. ITRC's Phytotechnologies Team has trained over 1,000 regulators and practitioners in the use of evapotranspiration covers for landfills. This alternative technology was estimated to save more than \$30 million in 2006 at landfills that would otherwise have used conventional multi-layer caps over the waste material. Other teams are addressing arsenic in groundwater, ecological land reuse, MTBE and other fuel oxygenates, perchlorate, and other environmental issues. Website: <http://www.itrcweb.org>

Pesticide Environmental Stewardship Program

EPA's Pesticide Environmental Stewardship Program (PESP) is a voluntary program that forms partnerships with pesticide users to reduce the potential health and environmental risks associated with pesticide use and to implement pollution prevention strategies. The program now includes more than 160 partnership agreements. The principle that guides PESP is that, even in the absence of additional regulatory mandates, the informed actions of pesticide users reduce risk even further. Member organizations pledge that environmental stewardship is an integral part of pest control, and they commit to working toward pesticide practices that reduce risk to humans and the environment. Members take a strategic approach to risk reduction and undertake specific, measurable activities toward achieving their risk reduction goals.

In its role as a partner, the Agency promotes the adoption of innovative, efficient pest control practices that reduce potential risks to public health and the food supply. The two projects described below are examples of the results that can be achieved under PESP.

- **Fruit Ridge Apple Project**—In the Fruit Ridge region of West-Central Michigan, the resident population of codling moth, a major apple pest, is developing resistance to organophosphate insecticides and slowly increasing to the point that even growers on a more traditional spray program cannot avoid significant worm damage. In 2004, Gerber, Pacific Bio-control, and Michigan State University teamed with fresh market apple packers to develop a region-wide codling moth mating disruption program. The program uses pheromones, which are natural chemicals living organisms produce, to attract the male codling moths into traps. This method results in less expensive control of the moths, elimination of pesticide residues from food crops, and improved environmental conditions in the region. Based on initial success in 2005, the project was expanded in 2006 to include over 1,300 contiguous apple acres on Fruit Ridge. The total acreage included in the program is projected to be well over 2,000 acres for 2006 and is likely to expand in the future. The goal of the project is for the growers to take over and expand the program.
- **Partnerships to Manage Vegetation in Utility Rights-of-Way**—EPA has reached agreements with several electric utility companies to use safer and more environmentally sound methods to control vegetation growing beneath power lines. For example, the New York Power Authority (NYPA) recognized in 1998 that it needed to better manage its rights of way (ROW) after a number of electrical outages and other problems surfaced. In 2001, NYPA adopted a new ROW program using techniques that minimize the use of herbicide to control the target tree species while preserving to the extent feasible all the surrounding compatible vegetation. In 2005,

NYPA began a second four-year treatment cycle under this program. Cases such as this support PESP's goal to be a platform for technology transfer to potential partners in the ROW sector. Website: <http://www.epa.gov/oppbppd1/PESP/>

Electronic Product Environmental Assessment Tool

The Electronic Product Environmental Assessment Tool (EPEAT) is a web-based tool launched in July 2006 to help institutional purchasers in the public and private sectors evaluate, compare, and select desktop computers, laptops, and monitors based on the environmental attributes of those products. EPEAT also provides marketplace rewards to manufacturers by recognizing products that reduce environmental and health benefits without delay in time-to-market. EPEAT is the product of over three years of work beginning in fall 2003 by more than 100 stakeholders, including institutional purchasers, manufacturers, trade associations, non-profit and advocacy organizations, federal and state government representatives, electronic products recyclers, and academics.

The database includes 251 EPEAT registered products from nine manufacturers, including Apple, CTL Corporation, Dell, HP, Lenovo, NEC, Northern Micro, Panasonic, and Sony Corporation. EPEAT has been integrated into over \$40 billion dollars in information technology contracts. EPA conservatively estimates that in the next five years purchases of equipment that meets the standard will save more than 13 million pounds of hazardous waste, 3 million pounds of non-hazardous waste, and 600,000 megawatt/hours of electricity.

The EPEAT workgroup also developed a voluntary consensus standard to use to evaluate the environmental preferability of computer desktops, laptops, and monitors. In April 2006, the Institute of Electrical and Electronics Engineers finalized the standard as the American National Standard for the Environmental Assessment of Personal Computer Products (1680). This standard is used to evaluate products in the EPEAT database. Also, in early 2006 the Green Electronics Council was awarded an EPA grant to provide marketing, product registration services, and to maintain the EPEAT web site. Website: <http://www.epeat.net>

Improving Communications

Workshop with DOI on Negotiated Rulemaking

EPA's commitment to collaborative processes extends to its core function of developing and implementing environmental regulations. On May 3, 2006, EPA's Conflict Prevention and Resolution Center and the U.S. Department of the Interior's (DOI) Office of Collaborative Action and Dispute Resolution sponsored a workshop titled "Moving Beyond Notice and Comment: Reflections on Negotiated Rulemaking." The workshop was the first meeting in 10 years to include federal experts in a structured dialogue on engaging the public in the regulatory process. As a result of the workshop, which over 50 participants attended, EPA and DOI are working on a number of additional projects, including developing a catalog of past negotiated rulemakings, expanding a bibliography of negotiated rulemaking source material, and assessing the possibility of reconstituting an interagency negotiated rulemaking workgroup. Furthermore, several EPA program offices are conducting stakeholder assessments to determine whether negotiated rulemaking would be appropriate for specific regulatory initiatives.

Memorandum of Understanding with USDA on Water Quality Trading

On October 13, 2006, EPA and USDA signed a landmark partnership agreement to establish better standards that define how to assign and verify water quality trading credits. Such standards are vital to creating viable markets in which, for the first time, individual landowners and other citizens can earn credits that can be traded with other dischargers that are required to comply with permit requirements. The agreement supports development of a pilot or other market-based demonstration project within the Chesapeake Bay basin to showcase the effectiveness of environmental markets. EPA's *2003 Water Quality Trading Policy* and document published in 2004 titled *Water Quality Trading Assessment Handbook: Can Trading Help You Achieve a Cleaner Watershed* support its efforts on water quality trading.

Website: <http://www.epa.gov/waterqualitytrading>,
<http://www.nrcs.usda.gov/about/strategicplan/>

Healthy Housing

EPA is working with the U.S. Centers for Disease Control (CDC), the U.S. Department of Housing and Urban Development (HUD), and the National Center for Healthy Housing to reduce exposure to a number of human health risks in and around low-income housing throughout the United States. This integrated approach involves the promotion of integrated pest management (IPM) practices, awareness and reduction of lead-based paint, improved indoor air quality, radon detection, and other initiatives. Training is provided to public health officials, building owners and managers, and residents. Peer-to-peer training for resident leaders provides greater longevity to the approaches recommended through the program. Recently, EPA worked with HUD to include IPM in its regulatory requirements for management of subsidized housing facilities; assisted CDC in the development of strategic plans; developed model contract specifications for acquiring IPM services; and disseminated guidance, training, and other tools to the public housing community to facilitate their adoption of IPM programs. In 2006, 750 people

were trained in the basics of IPM. Successful IPM interventions have reduced pest service calls by 90 percent while reducing pesticide use by an equivalent amount.

Website: <http://www.centerforhealthyhousing.org>

NACEPT Project on Environmental Stewardship and Cooperative Conservation

In May 2006, EPA Administrator Stephen Johnson asked the National Advisory Council for Environmental Policy and Technology (NACEPT), an EPA federal advisory committee formed in 1988, to evaluate EPA's activities on cooperative conservation.

The charge to NACEPT asks that the council consider EPA efforts in the following areas: human resource systems, EPA leadership of cooperative conservation efforts, innovative ways to engage the public in federal decision making, and strategic approaches to empower states and local communities to initiate more collaborative problem solving. A NACEPT subcommittee chaired by Erik Myers of The Conservation Fund is developing this report. NACEPT expects to deliver the final report to EPA in summer 2007.

Website: <http://www.epa.gov/ocem/nacept/>

Collaboration in EPA's NEPA Review Program

EPA's Office of Federal Activities (OFA) coordinates the agency's review of environmental impact statements, which federal agencies prepare pursuant to the National Environmental Policy Act (NEPA) to address the environmental impacts of proposed major federal actions. Recognizing the benefit of using collaborative approaches in the NEPA review process, OFA asked the U.S. Institute for Environmental Conflict Resolution (USIECR) to conduct a program assessment to learn how EPA NEPA reviewers and federal agencies currently work together and solve problems that arise in the course of NEPA environmental review. The program assessment was coordinated through EPA's Conflict Prevention and Resolution Center. In October 2006, USIECR issued a report summarizing the results of its program assessment. The conclusions of the report strongly support the expansion of collaborative processes and the development of collaborative capacity among participants in the NEPA review process. OFA intends to work closely with its partners both within EPA and in other federal agencies as it considers next steps and approaches and in setting priorities for implementation of the recommendations in the report.